

UNCLASSIFIED

Partners in Environmental Technology Technical Symposium & Workshop

November 29 – December 1, 2011,
Washington Hilton in Washington, D.C.

Challenges for Hazardous Material Management in Europe
“Where Do You Think You’re Going with That?”

Kurt P. Lengert C10SSS
Command Hazardous Material Program Manager

29 Nov 2011



United States
European Command
“Stronger Together”

UNCLASSIFIED

EC J4-EDDOC 27 Nov 2011

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE NOV 2011		2. REPORT TYPE		3. DATES COVERED 00-00-2011 to 00-00-2011	
4. TITLE AND SUBTITLE Challenges for Hazardous Material Management in Europe: 'Where Do You Think You're Going with That?'				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Air Forces in Europe,HQ USAFE A4/7 (CDGP),Building 529 Room 322, Unit 3050 Box 10,APO,AE,09094-3010				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES Presented at the Partners in Environmental Technology Technical Symposium & Workshop, 29 Nov ? 1 Dec 2011, Washington, DC. Sponsored by SERDP and ESTCP.					
14. ABSTRACT This talk will provide an update on the European Command Hazardous Material Management Program (EUCOM HMMP). A brief introduction will include the importance of guidance harmonization and standardization for U.S. Forces in Europe, along with Article II, Status of Forces Agreement (SOFA) compliance. The presentation will provide an overview of HMMP hazard communication (HazCom)/employer duties and movement control of hazardous material (HazMat) for improved risk management. Supply chain impacts of implementing the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals and European Union (EU) regulations will be discussed. Finally, EUCOM's role in safeguarding military readiness as outlined in DoD's Strategic Plan for the EU Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) will be described.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 35	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

KEYNOTE ADDRESS
WHERE DO YOU THINK YOU'RE GOING WITH THAT?

MR. KURT LENGERT
U.S. Air Forces in Europe
HQ USAFE A4/7 (CDGP)
Building 529 Room 322, Unit 3050 Box 10
APO AE 09094-3010
(+49)(0)6371-4051301
Kurt.Lengert@ramstein.af.mil

This talk will provide an update on the European Command Hazardous Material Management Program (EUCOM HMMP). A brief introduction will include the importance of guidance harmonization and standardization for U.S. Forces in Europe, along with Article II, Status of Forces Agreement (SOFA) compliance. The presentation will provide an overview of HMMP hazard communication (HazCom)/employer duties and movement control of hazardous material (HazMat) for improved risk management. Supply chain impacts of implementing the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals and European Union (EU) regulations will be discussed. Finally, EUCOM's role in safeguarding military readiness as outlined in DoD's Strategic Plan for the EU Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) will be described.

UNCLASSIFIED

Overview

- Mission
- Background
- Challenges
- REACH
- Employer Duties
- Hazard Communication
- Safety Data Sheet
- Hazard Classification
- Summary
- Links



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED



Movement

Training



Procurement

Environment



***Safety &
Security***

Health



*United States
European Command*
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Background 1

DOD operations in EUCOM area are based on treaties

- North Atlantic Treaty from 1949 and NATO Status of Forces Agreement from 1951 -- 28 countries; 21 of those are European Community Members
- Partnership for Peace Program – Allows bi-lateral agreements between members of the North Atlantic Treaty and individual non-NATO partner countries -- 22 countries; 12 former members are now NATO members
- European Community members 27 countries – 21 countries are NATO member;



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Background 2

DOD operations in EUCOM area are based on treaties

- North Atlantic Treaty from 1949 and NATO Status of Forces Agreement from 1951 -- 28 countries; 21 of those are European Community Members
 - Regulates conditions between sending state and receiving state for
 - ✓ Military members → privileges
 - ✓ Civilian components → privileges
 - ✓ All others (local labor/civilian contractors) → no privileges

A challenge for military business processes!



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Background 3

DOD operations in EUCOM area are based on treaties

- Partnership for Peace Program – Allows bi-lateral agreements between members of the North Atlantic Treaty and individual non-NATO partner countries -- 22 countries;
 - Bi-lateral agreements between PfP and NATO member
 - ✓ Military members → privileges
 - ✓ Civilian components → privileges
 - ✓ All others (local labor/civilian contractors) → no privileges

A challenge for military business processes!



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Background 4

DOD operations in EUCOM area are based on treaties

- European Community members 27 countries – 21 countries are NATO member; PfP members are recognized
 - EC regulations for market to be respected or applied by military organizations
 - ✓ Military forces of EC countries → additional privileges
 - ✓ Military members of NATO countries → privileges recognized
 - ✓ Civilian components of NATO countries → privileges recognized
 - ✓ PfP members → limited privileges
 - ✓ All others (local labor/civilian contractors) → no privileges

A challenge for military business processes!



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Background 5

DOD Strategic Plan REACH

- Describes threat to DOD mission for stationed or transiting units
- Has consequences for suppliers
- Has two major task to EUCOM
 - Ensure the DOD supply chain is not disrupted!
 - ✓ Ensure waivers are in place if logistics industry is used!
 - Facilitate and resolve Defense –Exemption issues in Europe related to REACH

A challenge for military business processes!



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Hazmat regulations in Europe a challenge for DOD!

□ Why?

- Provide a standard for US Forces in Europe
- Comply with Article II, Status of Forces Agreement (SOFA), 19 Jun 1951
 - Respect the law of the receiving State
 - The sending State agrees to take necessary of measures to that end.

But:

- EU policy mix: internal market, environment and defense
- EU ESOH requirements apply to local labor and contractors
- Bi-lateral scenario for US Forces – no single POC
- Military regulations cannot be applied to civilian contractors/industry.
- Military regulations protect locally hired labor.
- SOFA privileges for contractors/industry providing logistics services require approval (granted very seldom)



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Hazmat regulations in Europe a challenge for DOD!

□ How?

- Identify which requirements must be met IAW the SOFA treaty
- Apply for the defense exemptions valid for European forces or specific to the US Forces
- Be aware of security and safety restrictions on chemicals and material under arms control acts (similar to ITAR, 22 CFR), REACH, RoHS, ODS;
- Be aware of employer duties imposed by EU regulations on ESOH
- Review and confirm technical requirements on classification, packaging, labeling, occupational exposure limits (OELs), waste disposal - basis REACH and GHS
- Establish or improve the network of formal contacts to Competent Authorities
- Ensure training and qualified resources
- Ensure proper systems
- Ensure deviations are authorized or notified (other than defense exemptions)
- Ensure proper statements of work for civilian contractors/industry



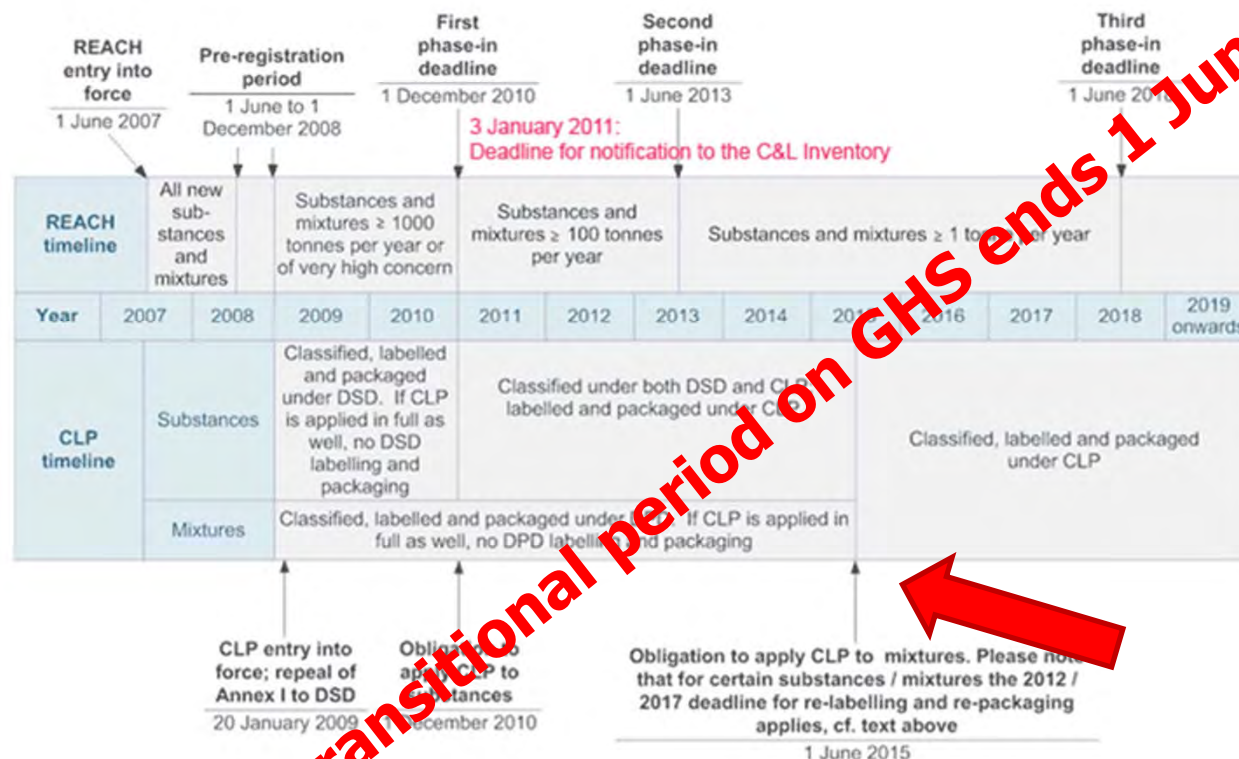
United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

The obligations that are due by these dates, including changes to the Safety Data Sheets, as well as their relationship to the REACH deadlines are illustrated in the figure below.



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

DOD Strategic Plan on Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH)

Summary of the Plan's nine goals to preserve and enhance military readiness:

- *Protect the availability of REACH-regulated chemicals and materials identified by DoD as having significant mission impact;*
Objective 1.1 - EUCOM rely on DLA
- *Ensure the performance of substitute chemicals and materials;*
Objective 1.3 - EUCOM work exemptions
- *Characterize the risks associated with the use of the chemicals and materials so identified to determine if action is necessary*
Objective 1.4 - EUCOM support
- *Establish where and how these substitute chemicals and materials are, or may be, used.*
Objective 2.1 - EUCOM support
- *Develop alternative methods of transportation or agreements to ensure the delivery of chemicals and materials having significant mission impacts.*
OBJECTIVE 3.3 - EUCOM lead
- *Guard against disruptions to the supply chain;
Facilitate and resolve defense-exemption issues in Europe related to REACH;*
Objective 4.1 - EUCOM lead
EUCOM engage w. MODs
- *Sustain this Strategic Plan as a living document by periodically reviewing current related policies, and updating goals and objectives as necessary.*
Objective 9.1 - EUCOM support
- *Minimize negative impacts to foreign military sales;*
Goal 5 - customs and War Weapon Control!
- *Assure acquisition strategies for DoD systems adequately address the management of risks associated with REACH;*
Goal 6 registration/authorization/DU
- *Capitalize on environment, safety, and health opportunities;*
Goal 7 & objective 9.2- EUCOM adjust HAZCOM
- *Capitalize on chemical management opportunities; and*
Goal 8
- *Plan for future regulations.*
Goal 9 - EUCOM monitor coordinated effort to respond to REACH



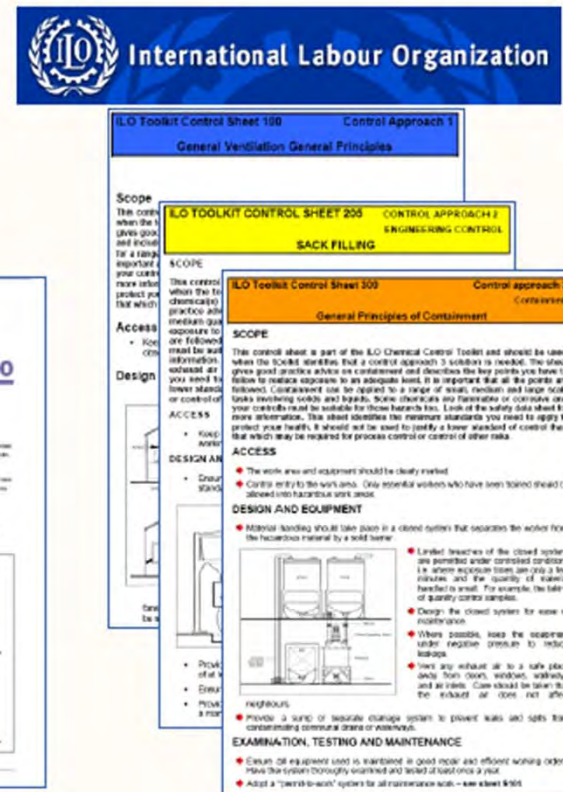
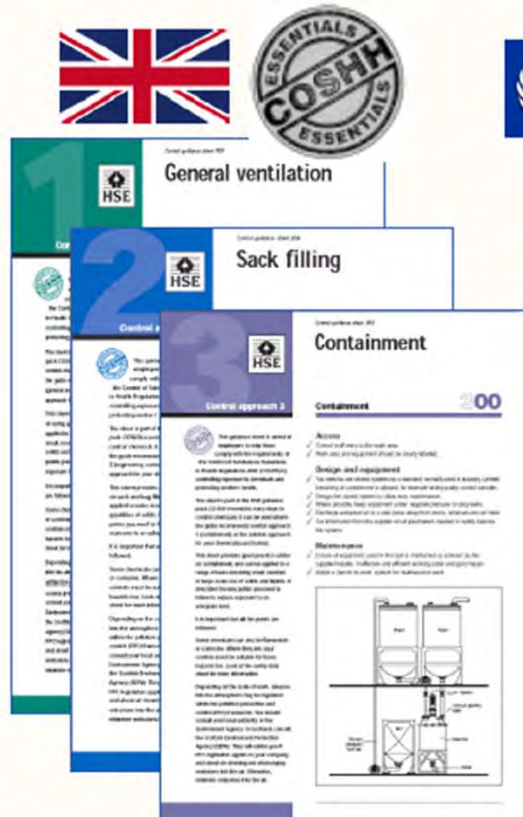
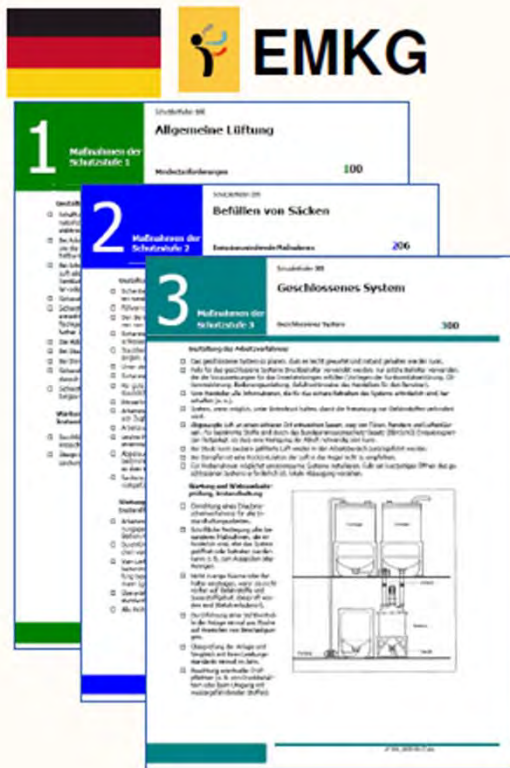
United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Employer duty → risk management



www.baua.de/emkg

<http://www.coshh-essentials.org.uk/>

http://www.ilo.org/legacy/english/protection/safework/ctrl_banding/toolkit/icct/index.htm



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Benefit: Standardized Hazard Communication Sample 1

UN Based Globally Harmonized System (GHS) → European Version EC 1272/2008 Classification, Packaging and Labeling (CLP)



GHS 01

Unstable explosives
Explosives of Divisions 1.1, 1.2, 1.3, 1.4
Self reactive substances and mixtures, Types A, B
Organic peroxides, Types A, B



GHS 02

Flammable gases, hazard category 1
Flammable aerosols, hazard categories 1, 2
Flammable liquids, hazard categories 1, 2, 3
Flammable solids, hazard categories 1, 2
Self-reactive substances and mixtures, Types B, C, D, E, F
Pyrophoric liquids, hazard category 1
Pyrophoric solids, hazard category 1
Self-heating substances and mixtures, hazard categories 1, 2
Substances and mixtures, which in contact with water, emit flammable gases, hazard categories 1, 3
Organic peroxides, Types B, C, D, E, F



GHS 03

Oxidizing gases, hazard category 1
Oxidizing liquids, hazard categories 1, 2, 3
Oxidizing solids, hazard categories 1, 2, 3



GHS 04

Gases under pressure:
Compressed gases;
Liquefied gases;
Refrigerated liquefied gases;
Dissolved gases



GHS 05

Corrosive to metals, hazard category 1
Skin corrosion, hazard categories 1A, 1B, 1C
Serious eye damage, hazard category 1



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Benefit: Standardized Hazard Communication Sample 2

UN Based Globally Harmonized System (GHS) → European Version EC 1272/2008 Classification, Packaging and Labeling (CLP)



GHS06

Acute toxicity (oral, dermal, inhalation), hazard categories 1, 2, 3



GHS08

Respiratory sensitization, hazard category 1
Germ cell mutagenicity, hazard categories 1A, 1B, 2
Carcinogenicity, hazard categories 1A, 1B, 2
Reproductive toxicity, hazard categories 1A, 1B, 2
Specific Target Organ Toxicity — Single exposure, hazard categories 1, 2
Specific Target Organ Toxicity — Repeated exposure, hazard categories 1, 2
Aspiration hazard, hazard category 1



GHS07

Acute toxicity (oral, dermal, inhalation), hazard category 4
Skin irritation, hazard category 2
Eye irritation, hazard category 2
Skin sensitization, hazard category 1
Organ Toxicity — Single exposure, hazard category 3
Respiratory tract irritation
Narcotic effects



GHS09

Hazardous to the aquatic environment
— Acute hazard category 1
— Chronic hazard categories 1, 2



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011


















UNCLASSIFIED

Benefit: Standardized Hazard Communication Sample 3

UN Based Globally Harmonized System (GHS) → European Version EC 1272/2008 Classification, Packaging and Labeling (CLP)

- Classification criteria is changing – change of primary hazard class possible
- More differentiation of hazards (28 instead of 15 classes)
- Transferring of old symbols to the new symbols is normally not possible

Challenge: two European systems until 1 June 2015! Parallel the US system!

	Physical Hazards --- Safety Office	Health Hazards/Bioenvironmental engineering/Health Monitoring	Environment
Old	  	  	
New	    	   	



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Required Safety Data Sheet (SDS) information - extract

- Section 1:
 - ✓ REACH registered use;
 - ✓ Purpose of use /recommendations for use
 - ✓ Justification for non-use applications
 - ✓ Emergency telephone No.

- Section 2:
 - ✓ Marking, Identification, labeling IAW CLP 1272/2008, or 67/548EEC, or 1999/45/EEC

- Section 3:
 - ✓ Chemicals which are relevant for the hazard classification
 - ✓ REACH registration No;
 - i.e. Tripropylene Glycole Diacrylate, REACH Reg No:
01-211948777-34-0000
 - 01 → fully registered
 - 02 → registration is submitted
 - 05 → notification is submitted



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Required Safety Data Sheet (SDS) information - extract

- Section 8:

- ✓ Occupational exposure limits based on national regulations
- ✓ Biological exposure limits

For all substances listed in section 3

- ✓ DNEL* and PNEC** values, if the SDS describes an exposition scenario

- Section 11, information to ten possible categories:

- ✓ Acute toxicity (section 3.1 CLP)
- ✓ Dermal irritation/corrosion (section 3.2 CLP)
- ✓ Irreversible damage or irritation to eyes (section 3.3 CLP)
- ✓ Sensitization, skin or respiratory (section 3.4 CLP)
- ✓ Germ cell mutagenicity (section 3.5 CLP)
- ✓ Carcinogenicity (section 3.6 CLP)
- ✓ Reproductive toxicity (section 3.7 CLP)
- ✓ Specific target organ toxicity, one time exposure (section 3.8 CLP)
- ✓ Specific target organ toxicity, repetitive exposure (section 3.8 CLP)
- ✓ Aspiration toxicity (section 3.10 CLP)

*DNEL = Derived No-Effect Level; **PNEC = Predicted No-Effect Concentration



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Required Safety Data Sheet (SDS) information - extract

- Section 12, information relating to environmental impact
 - ✓ Toxicity
 - ✓ Persistence and degradation
 - ✓ Bio-accumulative potential
 - ✓ Mobility in soil
 - ✓ Results from assessment regarding PBT* and vPvB**
 - ✓ Other negative effects
- Section 13, Disposal information
 - ✓ Safety relevant information for personnel in charge of duties relating to the disposal of hazardous waste. Additional information not provided in section 8 will be placed here.
- Section 14, Transport information
 - ✓ Classification, marking, labeling IAW DG regulations valid in Europe
- Section 15, Regulations
 - ✓ Regulations applicable to the substance/mixture regarding public safety, occupational safety and health, environmental protection.
 - ✓ ESOH risk assessment
 - ✓ Information regarding registration or restriction
 - ✓ National rules: i.e. drinking water contamination category, storage classes;

* PBT= Persistent, Bio-accumulative, Toxic; ** vPvB=very persistent and very bio-accumulative



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Concentration limits for substance, or substances in mixtures (extract):

- ✓ Acute toxicity
 - Acute toxicity cat 1,2,3: $\geq 0.1\%$
 - Acute toxicity cat 4: $\geq 1\%$
- ✓ Dermal irritation/corrosion, Cat 1A, 1B, 1C and 2 : $\geq 1\%$
- ✓ Irreversible damage or irritation to eyes, Cat 1 and 2: $\geq 1\%$
- ✓ Sensitization, skin or respiratory: (prev. $\geq 1\%$) $\geq 0.1\%$
- ✓ Germ cell mutagenicity, Cat 1A and 1B: $\geq 0.1\%$
- ✓ Germ cell mutagenicity, Cat 2: $\geq 1\%$
- ✓ Carcinogenicity Cat 1A, 1B, and 2: $\geq 0.1\%$
(prev. between $\geq 0.1\% \leq X\% \geq 1\%$)
- ✓ Reproductive toxicity Cat 1A, 1B and 2 and effects through lactation $\geq 0.1\%$
(prev. between $\geq 0.1\% \leq X\% \geq 1\%$)
- ✓ Specific target organ toxicity, one time exposure, Cat 1 and 2 (prev 0.1%) $\geq 1\%$
- ✓ Specific target organ toxicity, repetitive exposure, Cat 1 and 2 $\geq 1\%$
- ✓ Aspiration toxicity (new not regulated previously) $\geq 10\%$
- ✓ Acute toxicity Cat 1, aquatic environment $\geq 0.1\%$
- ✓ Chronic aquatic toxicity, Cat 1 $\geq 0.1\%$
- ✓ Chronic aquatic toxicity, Cat 2,3, and 4 (relief, old 0.1%) $\geq 1\%$
- ✓ Ozone depleting substance (new in GHS; prev. CLP only) $\geq 0.1\%$



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Argument regarding business know how:

**Confidentiality upon request and approval is possible
by using alternate generic names.**

Sample : butan-2-ol (index 603-127-00-5);

Index class 603: alcohols and derivatives

Subclass: aliphatic alcohol

SDS identification by generic name: aliphatic alcohol



United States
European Command
"Stronger Together"

Unclassified





EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Of concern: Relation between dose and effect.

LD₅₀; single dose which statistically kills 50% of exposed animals
when consumed orally or in contact with skin.

LC₅₀; lethal dose when inhaled.

Classification	Toxicity, oral consumption LD ₅₀ (mg/kg)	Toxicity, skin contact LD ₅₀ (mg/kg)	Inhalation toxicity; dust and gaseous LC ₅₀ (mg/l/4h)	Pictogram/Code/ Signal word
Acute Toxicity Cat 1	≤ 5 H300	≤ 50 H310	≤ 0.05 H330	 GH06/Danger
Acute Toxicity Cat 2	> 5 and ≤ 50 H300	> 50 and ≤ 200 H310	> 0.05 and ≤ 0.5 H330	 GH06/Danger
Acute Toxicity Cat 3	> 50 and ≤ 300 H301	> 200 and ≤ 1000 H311	> 0.5 and ≤ 1.0 H331	 GH06/Danger
Acute Toxicity Cat 4	> 300 and ≤ 2000 H302	> 1000 and ≤ 2000 H312	> 1.0 and ≤ 5.0 H332	 GH06/Warning



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Of concern: Classification vs. Identification Marking

Classification		Identification Marking	
Hazard class; Risk category; Hazard Code	Code for hazard and risk identification	Pictogram; Code of signal word	Code for hazard and risk identification
Acute Tox., Cat 4	H302	GHS07 Wng	H302

Acute Tox., 4, H302



Harmful if swallowed; Warning!



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Hazardous to the aquatic environment! All hazard classes must be reviewed for this criterion!

Acute (short-term) aquatic hazard

Acute Category 1:	96 hr LC ₅₀ (for fish)	≤ 1 mg/l and/or
	48 hr EC ₅₀ (for crustacea)	≤ 1 mg/l and/or
	72 or 96 hr E _r C ₅₀ (for algae or other aquatic plants)	≤ 1 mg/l.

Chronic (long-term) aquatic hazard

Chronic Category 1

96 hr LC ₅₀ (for fish)	≤ 1 mg/l and/or
48 hr EC ₅₀ (for crustacea)	≤ 1 mg/l and/or
72 or 96 hr E _r C ₅₀ (for algae or other aquatic plants)	≤ 1 mg/l

and the substance is not rapidly degradable and/or the experimentally determined BCF ≥ 500 (or, if absent, the log K_{ow}*** ≥ 4).

Chronic Category 2

96 hr LC ₅₀ (for fish)	> 1 to ≤ 10 mg/l and/or
48 hr EC ₅₀ (for crustacea)	> 1 to ≤ 10 mg/l and/or
72 or 96 hr E _r C ₅₀ (for algae or other aquatic plants)	> 1 to ≤ 10 mg/l

and the substance is not rapidly degradable and/or the experimentally determined BCF* ≥ 500 (or, if absent, the log K_{ow} ≥ 4), unless the chronic toxicity NOECs** are > 1 mg/l.

*BCF: Bio-concentration factor; **NOEC = No observed effect concentration; ***K_{ow} = Octanol/Water partition coefficient






United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Determination of risk to the aquatic environment

Classification	L(E)C ₅₀ (mg/L)	Degradation	Accumulation	Pictogram/ code/signal word
Aquatic Acute 1; H400	≤ 1	- Not relevant -	- Not relevant -	GHS09/Warning 
Aquatic Acute 1; H400 Aquatic Chronic 1; H410	≤ 1	- Not rapid -	BCF ≥ 500 ; When BCF is missing: Log P _{ow} ≥ 4	GHS09/Warning 
Aquatic Chronic 2 H411	$> 1 \leq 10$ NOEC ≤ 1 mg/L	- Not rapid -	BCF ≥ 500 ; When BCF is missing: Log P _{ow} ≥ 4	GHS09/Warning 
Aquatic Chronic 3 H412	$> 10 \leq 100$ NOEC ≤ 1 mg/L	- Not rapid -	BCF ≥ 500 ; When BCF is missing: Log P _{ow} ≥ 4	-- / --
Aquatic Chronic 4 H413	Solution ≤ 1 mg/L NOEC ≤ 1 mg/L	- Not rapid -	BCF ≥ 500 ; When BCF is missing: Log P _{ow} ≥ 4	-- / --

*BCF: Bio-concentration factor; **NOEC = No observed effect concentration;



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Summary

1. EU regulations impact - status of forces demands respecting or applying regulations and US Forces take necessary of measure to that end?
2. DOD Policy/Guidance how to apply EU regulations w/o adverse mission impact?
3. Negotiations leading to agreements on differences? No single POC!
4. Tools (IT) to provide information for proper process steering? Data from DLA/GSA/Service PMs/unit acquisition processes?
5. Standardized HAZMAT program identifying which EU regulations apply to US Forces in Europe?
6. National differences (US or European) will still apply if more restrictive?
7. Transitional periods on REACH, GHS/CLP end in June 2015. RoHS, ODS lists individual periods, based on material.
8. Business study to determine cost of adjustment – but also Identification of cost prevention, improvement of processes and efficiency.




United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Links and References:

<div>  Substances of Very High Concern (SVHC) </div>								
Substance identification			Proposing authority	Reason for proposing	Date of publication	Deadline for commenting	Link to the Annex XV report	Link for comments
Substance name	EC number	CAS number						
Cobalt dichloride	231-589-4	7646-79-9	ECHA ²	CMR	22/03/2011 ⁴	03/05/2011 ⁴	[View]	Consultation is now ov
2-ethoxyethyl acetate	203-839-2	111-15-9	Belgium ³	CMR	21/02/2011	07/04/2011	[View]	Consultation is now ov
strontium chromate	232-142-6	7789-06-2	France	CMR	21/02/2011	07/04/2011	[View]	Consultation is now ov
1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	Denmark	CMR	21/02/2011	07/04/2011	[View]	Consultation is now ov
Hydrazine	206-114-9	7803-57-8 302-01-2	ECHA ²	CMR	21/02/2011	07/04/2011	[View]	Consultation is now ov
1-methyl-2-pyrrolidone	212-828-1	872-50-4	ECHA ²	CMR	21/02/2011	07/04/2011	[View]	Consultation is now ov
1,2,3-trichloropropane	202-486-1	96-18-4	ECHA ²	CMR	21/02/2011	07/04/2011	[View]	Consultation is now ov
1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	ECHA ²	CMR	21/02/2011	07/04/2011	[View]	Consultation is now ov
Cobalt(II) sulphate	233-334-2	10124-43-3	Netherlands	CMR	30/08/2010	14/10/2010	[View]	Consultation is now ov
Cobalt(II) dinitrate	233-402-1	10141-05-6	Netherlands	CMR	30/08/2010	14/10/2010	[View]	Consultation is now ov
Cobalt(II) carbonate	208-169-4	513-79-1	Netherlands	CMR	30/08/2010	14/10/2010	[View]	Consultation is now ov
Cobalt(II) diacetate	200-755-8	71-48-7	Netherlands	CMR	30/08/2010	14/10/2010	[View]	Consultation is now ov
2-Methoxyethanol	203-713-7	109-86-4	Austria	CMR	30/08/2010	14/10/2010	[View]	Consultation is now ov
2-Ethoxyethanol	203-804-1	110-80-5	Austria	CMR	30/08/2010	14/10/2010	[View]	Consultation is now ov
1,3,5 Trichlorobenzene	203-608-6	108-70-3	Germany	PBT like substance (equivalent level of concern)	30/08/2010	14/10/2010	[View]	Consultation is now ov
1,2,3 Trichlorobenzene	201-757-1	87-61-6	Germany	PBT like substance (equivalent level of concern)	30/08/2010	14/10/2010	[View]	Consultation is now ov
1,2,4 Trichlorobenzene	204-428-0	120-82-1	Germany	PBT like substance (equivalent level of concern)	30/08/2010	14/10/2010	[View]	Consultation is now ov

<http://echa.europa.eu>



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Links and References:

European Commission
Joint Research Centre
Institute for Health and Consumer Protection

http://esis.jrc.ec.europa.eu

European Commission > JRC > IHCP > ESIS

ESIS EINECS ELINCS NLP BPD PBT CLP/GHS HPV-LPV IUCLID DS ORATS

- Search Annex VI

Search Annex VI to Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Dangerous Substances

?

Language	DE
Index number	
EC number	
CAS number	67-63-0
Substance Name	
Risk Phrases To select more than one code, keep the CTRL key	R2 R3 R4 R5 R6
Hazard Statement Codes To select more than one code, keep the CTRL key	EUH059 H200 H201 H203 H220
ATP	ALL

Search Clear



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Links and References:

European Commission
Joint Research Centre
Institute for Health and Consumer Protection

http://esis.jrc.ec.europa.eu

European Commission > JRC > IHCP > ESIS

ESIS EINECS ELINCS NLP BPD PBT CLP/GHS HPV-LPV IUCLID DS ORATS

- Search Annex VI

Details on Substances Classified in Annex VI to Regulation (EC) No 1272/2008

General Information			
Index number	Notes (alphabetic / numeric)		ATP inserted / ATP updated
	Table 3.1	Table 3.2	
603 117 00 0	/	/	CLP00 /

Sub	EC No	Cas No	Name
1	200-661-7	67-63-0	2-Propanol Isopropanol Isopropylalkohol

i

Regulation (EC) No 1272/2008 Annex VI Table 3.1				
Classification		Labelling		
Hazard Class and Category Code(s)	Hazard Statement Code(s)	Pictogram Signal Word Code(s)	Hazard Statement Code(s)	Suppl. Hazard statement code(s)
Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336	GHS02 GHS07 Dgr	H225 H319 H336	



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Links and References:

<http://esis.jrc.ec.europa.eu>

Regulation (EC) No 1272/2008 Annex VI Table 3.1

Classification		Labelling		
Hazard Class and Category Code(s)	Hazard Statement Code(s)	Pictogram Signal Word Code(s)	Hazard Statement Code(s)	Suppl. Hazard statement code(s)
Flam. Liq. 2 Eye Irrit. 2 STOT SE 3	H225 H319 H336	GHS02 GHS07 Dgr	H225 H319 H336	

Specific Concentration Limits and M Factors

Concentration	Classification
-	-

Pictogram(s)

Flame Exclamation mark

Regulation (EC) No 1272/2008 Annex VI Table 3.2

Classification	Risk phrases	Safety phrases	Indication(s) of danger
F+ R11 Xi, R38 R07	11 36 67	2 7 10 24/25 26	F Xi

Concentration Limits

Concentration	Classification
-	-

Seveso Data

Seveso Substance	Main Seveso Category	Other Seveso Categories	Seveso Concentration	Categories
Yes	7b	-	-	-

Symbol(s)

Highly flammable Irritant



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED


Links and References:


INFOCON 3 UNCLASSIFIED

EUR-Lex - Microsoft Internet Explorer provided by US Air Force

http://eur-lex.europa.eu/en/index.htm

EUR-Lex

This site is a part of  About EUR-Lex | Si

 **EUR-Lex** Access to European Union law

EUROPA > EUR-Lex Home

OFFICIAL JOURNAL

SIMPLE SEARCH

by word
by document number
by date
by OJ reference
by CELEX number
more options...

ADVANCED SEARCH

COLLECTIONS

Treaties
International agreements
Legislation in force
Preparatory acts
Case-law
Parliamentary questions

PRACTITIONER'S CORNER

Budget of the European Union
ECICS
The institutions' registers
TARIC
EU Pesticides Database
EU legislation on statistics

About EU law

Summaries of EU Legislation
The ABC of European Union law
Legislative drafting
Statistics on EU legislation

News

► [Selection of new documents](#)

► **25/11/2011:** Commission Regulation (EU) No 1178/2011 of 3 November 2011 laying down technical requirements and administrative procedures related to civil aviation aircrew pursuant to Regulation (EC) No 216/2008 of the European Parliament and of the Council (Text with EEA relevance) ► [pdf](#)

► **23/11/2011:** Commission Implementing Regulation (EU) No 1206/2011 of 22 November 2011 laying down requirements on aircraft identification for surveillance for the single European sky (Text with EEA relevance) ► [pdf](#)

► **23/11/2011:** Commission Implementing Regulation (EU) No 1207/2011 of 22 November 2011 laying down requirements for the performance and the interoperability of surveillance for the single European sky (Text with EEA relevance) ► [pdf](#)

► **23/11/2011:** Regulation (EU) No 1173/2011 of the European Parliament and of the Council of 16 November 2011 on the effective enforcement of budgetary surveillance in the euro area ► [pdf](#)

► **23/11/2011:** Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011 on the prevention and correction of macroeconomic imbalances ► [pdf](#)

► **23/11/2011:** Council Regulation (EU) No 1177/2011 of 8 November 2011 amending Regulation (EC) No 1467/97 on speeding up and clarifying the implementation of the excessive deficit procedure ► [pdf](#)

► **23/11/2011:** Council Directive 2011/85/EU of 8 November 2011 on requirements for budgetary frameworks of the Member States ► [pdf](#)


► **22/11/2011:** Decision No 1194/2011/EU of the European Parliament and of the Council of 16 November 2011 establishing a European Union action for the European Heritage Label ► [pdf](#)

► **22/11/2011:** Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council (Text with EEA relevance) ► [pdf](#)

► **Thematic files**

Legislation on selected themes

9/11/2011: Public debt » [new](#)

► **Newsletter 16/09/2011** 

Find national case-law via EUR-Lex



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

<http://eur-lex.europa.eu/> - to find EU regulations

Links and References:

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Text with EEA relevance)

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) (Text with EEA relevance) – *SDS format*.

Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer (Text with EEA relevance)

Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93 (Text with EEA relevance)

Directive 2010/35/EU of the European Parliament and of the Council of 16 June 2010 on transportable pressure equipment and repealing Council Directives 76/767/EEC, 84/525/EEC, 84/526/EEC, 84/527/EEC and 1999/36/EC (Text with EEA relevance)

Directive 2009/43/EC of the European Parliament and of the Council of 6 May 2009 simplifying terms and conditions of transfers of defense-related products within the Community (Text with EEA relevance)



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Links and References:



<http://reach-clp-helpdesk.de>



<http://echa.eu>



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011

UNCLASSIFIED

Discussion

Contact information:

Kurt.Lengert@eucom.mil

Mobile: (49) (0) 160 90853282

HQ EUCOM J4-EDDOC

Patch Barracks

Stuttgart-Vaihingen

Germany



United States
European Command
"Stronger Together"

Unclassified

EC J4-EDDOC 27 Nov 2011